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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/894,128	06/29/2001	Wei-Che Yu	YUWE3002/EM/6947	5733
23364	7590	05/26/2005	EXAMINER	
BACON & THOMAS, PLLC 625 SLATERS LANE FOURTH FLOOR ALEXANDRIA, VA 22314			BILGRAMI, ASGHAR H	
			ART UNIT	PAPER NUMBER
			2143	

DATE MAILED: 05/26/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/894,128

Applicant(s)

YU, WEI-CHE

Examiner

Asghar Bilgrami

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☒ Claim(s) 1-6 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 June 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Drawing Objections

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, one-client-multi-server mode together with every network apparatus on the same network, assigning a special port number in the in the header of the UDP as the port number, setting the UDP source port number according to a mechanism at the client end and after receiving the said request packet and accomplishing the operation requested to be conducted, the said every network apparatus exchanges the UDP destination port number and the said UDP source port number and then transmits it to the client by broadcasting, as claimed in claim 1, and also client end first adds the password to the entire request packet excluding the columns of authenticator and server MAC address according to a set method of code encryption, then fills it in the said authenticator column and sends the said request packet out from the client end; after the request packet being received by the said every server, the said every server uses the same code encryption method to encrypt the entire request packet into data according to the preset password provided by the said every server, compares it with the data in the authenticator column in the said request packet; if both are the same, the operation of getting or setting is conducted; otherwise, the request of the said packet is rejected as claimed in claim 6 which perhaps considered as a crucial feature of the claim invention must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

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2. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. The specification is objected to under 35 U.S.C. 112, first paragraph, as failing to adequately teach, in such clear and concise manner to enable an ordinary skill in the art to pertain, make and use to invention without undue experimentations, i.e., failing to disclose

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establishing client-multi-server mode together with every network apparatuses, how the NEAP cause every network apparatus to assign a special communication port number in the header of a UDP as the port number, set the UDP source port number according to a mechanism at the client end and after receiving the said request packet and accomplishing the operation requested to be conducted, the said every network apparatus exchanges the said UDP destination port number and the said UDP source port number and then transmits it to the client end.

Applicant's disclosure is insufficient to allow one of ordinary skill in the art to make or use the invention without undue experimentation because applicant did not adequately disclose the necessary apparatus to perform the claimed method. See In re Gunn, 190 USPQ 402, 406 (CCPA 1976.) In fact applicant's disclosure does not provide any details to the claim language and merely repeats the claim language in the specification. Applicant is advised that further amendment should accompany with specific passage citation to support the amendment, to avoid further delaying prosecution.

5. Claim 6 is again rejected under 35 U.S.C. 112, first paragraph, for reason set forth in the objection to the specification. The specification on page 6 merely repeats claim 6 and does not provide any insight to the claim.

6. Claims 3, 4 & 5 are rejected under 35 U.S.C. 112, first paragraph; buy virtue of their dependency on claim 1.

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7. The claim language is ambiguous and the specification merely replicates the claim language.

Claim Objections

8. The claim language is ambiguous and fails to follow the standard given by the MPEP § 2111.03, which requires that claim should be constructed in such a format that simplifies the claim analysis. MPEP § 2111.03 requires that the claim(s) should include a preamble which broadly describes the invention, a transition phrase which clearly defines the scope of a claim with respect to what unrecited additional components or steps, if any, are excluded from the scope of the claim and finally the body of the claim which clearly shows the elements, steps and relationships thereof which constitute the claimed subject matter that the applicant considers to be the invention.

For the purposes of examination the examiner will interpret the claim 1 as follows:

9. “A network apparatus management protocol (NEAP) that uses a network apparatus management tool to establish a one-client-multi-server mode together with every network apparatuses on the same network” **{Preamble}**

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The above claim 1 passage is considered as the preamble by the examiner that defines the environment of the claim. The examiner interpreted NEAP as the computer/device which can establish connection with other computer(s)/device(s) on the network.

See Catalina Marketing International Inc. v. Coolsavings.com, Inc., 62 USPQ2d 1781, 1785 (Fed. Cir. 2002).

See Pitney Bowes, 51 USPQ2d at 1165-66; *Kropa v. Robie*, 88 USPQ 478, 480-481 (CCPA 1951).

10. “Whereby, through the said NEAP, the said management tool plays the role of one-client and another network apparatus on the same network plays the role of multi-server, the said management tool being arranged according to said NEAP to cause the said every network apparatus, to assign a special communication port number in the header of a User Datagram Protocol (UDP) as the poet number,” {1st Limitation}

The above claim 1 passage, is considered as the first limitation by the examiner and the examiner interpreted it as a computer/device that assigns a communication port in the header of the UDP request packet.

11. “To Cause a request packet of a client end to work as the UDP destination port number based on the UDP communication port number assigned by the NEAP, and also to set the UDP source port number according to a mechanism at the client end” {Result}

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The above claim 1 passage is considered as the result by the examiner. The “cause” in the result above was followed after “whereby”. A “whereby or wherein “ clause that merely states the results of the limitations in the claim adds nothing to the patentability or substance of the claim.

See Texas Instruments Inc. v. International Trade Commission, 26 USPQ2d 1018 (fed. Cir. 1993); Griffin v. Bertina, 62 USPQ2d 1431 (Fed. Cir. 2002) ; Amazon.com Inc v. Barnesandnoble.com Inc., 57 USPQ2d 1747 (Fed. Cir. 2001).

12. “Wherein, after receiving the said request packet and accomplishing the operation requested to be conducted, the said every network apparatus exchanges the said UDP destination port number and the said UDP source port number, “ **{2nd Limitation}**

The above claim 1 passage is considered the second limitation by the examiner and the examiner interpreted the claim as “after receiving the request packet the network device(s)/computer(s) switch the UDP destination and source port numbers.”

13. “Then transmit it to the client end by broadcasting to enable the said client and to easily archive the purpose of managing all the said network apparatuses on the same network.” **{3rd Limitation}**

The above claim 1 passage is considered the third limitation by the examiner and the examiner interpreted it as the” then broadcasts the packet back to the client where it can be stored for device(s)/computer(s) management purposes.”

Claim Rejections - 35 USC § 103

14. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

15. Claims 1-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hwa-Chun-Lin et al "An Algorithm for Topology Discovery of IP Networks" 1998 IEEE and Bonn et al (U.S. 6,618,755).

As per claim 1 Hwa-Chun-Lin disclosed an algorithm similar to Network apparatus management Protocol (NEAP), the said NEAP uses a network apparatus management tool to establish a one-client-multi-server mode together with all the network apparatuses on the same network, **{the preceding claim language was interpreted as, NEAP being a computer/device which can establish connection with other computer(s)/device(s) on the network}** see Lin page 1192, col.1, lines 14-23, col.2, lines 10-14 & page 1193, col.1, lines 54-56, col.2, lines 1-11), whereby, through the said NEAP, the said management tool plays the role of one-client and the other network apparatus on the same network plays the role of multi-server to make the said every network apparatus to assign a special communication port number in the header of a User Datagram Protocol (UDP) as the port number, **{the preceding claim language was interpreted**

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as, a computer/device that assigns a communication port in the header of the UDP request packet} to cause the request packet of the client end to work as the UDP destination port number based on the UDP communication port number assigned by the said NEAP, and to set the UDP source port number according to the mechanism at the client end, {this is the Result, see objection section} wherein, after receiving the said request packet and accomplishing the operation requested to be conducted, the said every network apparatus exchanges the said UDP destination port number and the said UDP source port number {the preceding claim language was interpreted as, “after receiving the request packet the network device(s)/computer(s) switch the UDP destination and source port numbers”} then transmits it to the client end by broadcasting to enable the said client end to easily achieve the purpose of managing all the said network apparatuses on the same network {the preceding claim language was interpreted as, “then broadcasts the packet back to the client where it can be stored for device(s)/computer(s) management purposes”}.

However Hwa-Chun-Lin did not explicitly disclose computer/device that assigns a communication port in the header of the UDP request packet , after receiving the request packet the network device(s)/computer(s) switch the UDP destination and source port numbers then broadcasts the packet back to the client where it can be stored for device(s)/computer(s) management purposes. In the same field of endeavor Bonn disclosed a computer/device that assigns a communication port in the header of the UDP request packet (col.5, lines 3-10), after receiving the request packet the network device(s)/computer(s) switch the UDP destination and

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source port numbers then broadcasts the packet back to the client where it can be stored for device(s)/computer(s) management purposes (col.4, lines 9-28).

Accordingly it would have been obvious to one having ordinary skill in the art at the time invention was made to incorporate the capability of specific communication port number as described by Bonn in the computer/device for detecting network apparatuses disclosed by Hwa-Chun-Lin in order to make the management and discovery algorithm more robust and reliable.

16. As per claim 2 (Hwa-Chun-Lin and Bonn) disclosed a Network apparatus management protocol according to Claim 1, wherein the columns for defining data of the packet code and server MAC address are included in the header of the said NEAP, wherein the said packet code can be divided into three major codes of discovering, getting and setting according to the different destination addresses; the said server MAC address is used to represent the server at the client end requesting for conducting the operations of discovering, assigning getting or setting (Bonn, col.2, lines 41-67 & col.4, lines 9-28).

17. As per claim 3 (Hwa-Chun-Lin and Bonn) disclosed a Network apparatus arrangement protocol according to Claim 2, wherein the data of the said NEAP includes a series of data columns for defining attributes, thereby the said attribute data is utilized to describe the data value to be gotten or set (col.4, lines 9-28).

18. Claims 4 & 5 (Hwa-Chun-Lin and Bonn) disclosed a Network apparatus arrangement protocol according to Claim 3, wherein, when the client end tends to conduct data getting toward

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the said server, the said client end can sequentially fill in the data item to be gotten into the said data column according to its attribute type, then send out the request packet; after the said packet being received by the said server, the said server sequentially decodes the attribute data in the said data column, fills the data in the said server corresponding to the said attribute type in the attribute value column of the said packet, and transmits the said packet back to the client end to enable the client end to easily get the data in the said server(Hwa-Chun-Lin, page 1193, col.1, lines 35-52 & col.2, lines 12-54).

19. As per claim 6 (Hwa-Chun-Lin and Bonn) disclosed a Network apparatus arrangement protocol according to Claim 3, wherein, before sending out the said request packet, the said client end first adds the password to the entire request packet excluding the columns of authenticator and server MAC address according to a set method of code encryption, then fills it in the said authenticator column and sends the said request packet out from the client end; after the request packet being received by the said every server, the said every server uses the same code encryption method to encrypt the entire request packet into data according to the preset password provided by the said every server, compares it with the data in the authenticator column in the said request packet; if both are the same, the operation of getting or setting is conducted; otherwise, the request of the said packet is rejected (Bonn, col.2, lines 5-10 & col.4, lines 1-8).

Response to Arguments

20. The applicant argued that “neither Lin article nor the Bonn patent disclose or suggest a network apparatus management protocol (NEAP) in which , recited in claim 1: a network management protocol is arranged to configure network devices by serving as a client, the network devices playing the role of multiple servers to the network management tool’s single client, and the multiple “servers”, i.e., the network or apparatuses, each sent UDP packets to the “client”, the UDP packets containing a source port number that identifies the client and a “special communication port number” that enables the network devices to carry out and respond to the management request simply by broadcasting a to a common IP and MAC destination address”.

As to applicant arguments due to the ambiguity of the claim language (see claim objections section above) the examiner has interpreted the claims accordingly.

Conclusion

21. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

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however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

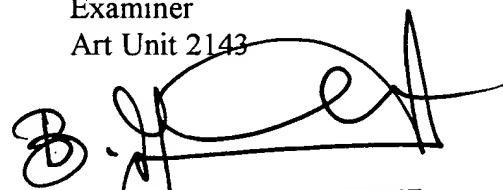
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Asghar Bilgrami whose telephone number is 571-272-3907. The examiner can normally be reached on M-F, 8:00-5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wiley can be reached on 571-272-3923. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

AB

Asghar Bilgrami
Examiner
Art Unit 2143



BUNJOD JAROENCHONWANIT
PRIMARY EXAMINER